



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,686	01/24/2002	Niels Rump	SCHO0093	3745

7590 07/03/2007
GLENN PATENT GROUP
3475 Edison Way
Suite L
Menlo Park, CA 94025

EXAMINER

HENNING, MATTHEW T

ART UNIT	PAPER NUMBER
----------	--------------

2131

MAIL DATE	DELIVERY MODE
-----------	---------------

07/03/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/913,686

Applicant(s)

RUMP ET AL.

Examiner

Matthew T. Henning

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

1 This action is in response to the communication filed on 6/6/2007.

2 **DETAILED ACTION**

3 *Continued Examination Under 37 CFR 1.114*

4
5 A request for continued examination under 37 CFR 1.114, including the fee set forth in
6 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is
7 eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)
8 has been timely paid, the finality of the previous Office action has been withdrawn pursuant to
9 37 CFR 1.114. Applicant's submission filed on 6/6/2007 has been entered.

10
11 *Response to Arguments*

12 Applicant's arguments filed 6/6/2007 have been fully considered but moot in view of the
13 new grounds of rejection presented below.

14 Claims 1-30 have been examined and claim 31 has been cancelled.

15 All objections and rejections not set forth below have been withdrawn.

16 *Claim Rejections - 35 USC § 103*

17 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
18 obviousness rejections set forth in this Office action:

19 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
20 section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
21 such that the subject matter as a whole would have been obvious at the time the invention was made to a person
22 having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the
23 manner in which the invention was made.

24
25 Claims 1-7, 14, 16-17, 19, 23, 25-29 are rejected under 35 U.S.C. 103(a) as being
26 unpatentable over Van Oorschot et al. (US Patent Number 5,850,443) hereinafter referred to as

Art Unit: 2131

1 Van Oorschot, and further in view of Nardone et al. (US Patent Number 5,805,700) hereinafter
2 referred to as Nardone, and further in view of Yatsukawa (US Patent Number 6,148,404).

3 Regarding claim 1, Van Oorschot disclosed a method for producing a payload data
4 stream comprising a header and a payload data block containing encrypted payload data (See
5 Van Oorschot Fig. 3 X-fields, header fields, and encrypted message field), comprising the
6 following steps: generating a payload data key for a payload data encryption algorithm for
7 encrypting payload data (See Van Oorschot Col. 6 Lines 41-43 and Fig. 3 "Create low trust
8 symmetric key" K'); encrypting a first section of the payload data using said payload data key
9 and said payload data encryption algorithm to obtain an encrypted section of said payload data
10 block of said payload data stream (See Van Oorschot Col. 6 Lines 42-43 and Fig. 3 "Symmetric
11 encryption" and "encrypted message"), said first section including audio data, video data, a
12 combination of audio data and video data, text data, or binary data forming an executable
13 program (See Van Oorschot Abstract ciphertext), wherein a second section of the payload data
14 remains unencrypted (See Van Oorschot Col. 6 Lines 45-47 "public key of entity A");
15 processing the unencrypted section of said payload data (See Van Oorschot Col. 6 Lines 45-50
16 "hash of X" which contains the public key of A) to deduce information characterizing the
17 unencrypted second section of said payload data (See Van Oorschot Col. 6 Lines 49-60 h40(X));
18 linking said information and said payload data key by means of an invertible logic linkage to
19 obtain a basic value (See Van Oorschot Col. 6 Lines 56-60 "K' XOR h40(X)"); encrypting said
20 basic value using a key of two keys being different from each other by an asymmetrical
21 encryption method, said two different keys being the public and the private keys respectively for
22 said asymmetrical encryption method, to obtain an output value being an encrypted version of

Art Unit: 2131

1 said payload data key (See Van Oorschot Col. 6 Line 60 – Col. 7 Line 7); and entering said
2 output value into said header of said payload data stream (See Van Oorschot Col. 6 Line 65 –
3 Col. 7 Line 7 and Fig. 3 “A’s header field” and “B’s header field”), but Van Oorschot failed to
4 disclose that the second section included audio data, video data, a combination of audio data and
5 video data, text data, or binary data forming an executable program, or the X-fields containing
6 audio data, video data, a combination of audio data and video data, text data or binary data
7 forming an executable program.

8 Nardone teaches that movie data needs to be protected from being copied and that this is
9 generally done through encrypting the movie data (See Nardone Col. 1 Lines 22-37), and further
10 that in order to save on processing cost, only portions of the movie data should be encrypted (See
11 Nardone Col. 1 Summary of the Invention).

12 Yatsukawa teaches that by providing a public key in a digital certificate, the public key
13 can be authenticated by the recipient of the key (See Yatsukawa Col. 5 Paragraph 1).

14 It would have been obvious to the ordinary person skilled in the art at the time of
15 invention to employ the teachings of Nardone in the encryption system of Van Oorschot by
16 encrypting video data, and further by only encrypting portions of the data. This would have been
17 obvious because the ordinary person skilled in the art would have been motivated to protect
18 movie data and to save on processing cost. It further would have been obvious to the ordinary
19 person skilled in the art at the time of invention to employ the teachings of Yatsukawa in the
20 encryption system of Van Oorschot by providing the public key in a public key certificate in the
21 X-fields. This would have been obvious because the ordinary person skilled in the art would

1 have been motivated to provide the recipient with means to verify the authenticity of the public
2 key. Furthermore, it was well know that public key certificates contain text data.

3 Regarding claim 17, Van Oorschot disclosed a method for decrypting an encrypted
4 payload data stream comprising a header and a payload data block containing a first section
5 having encrypted payload data (encrypted message), said first section including audio data, video
6 data, a combination of audio data and video data, text data, or binary data forming an executable
7 program (See Van Oorschot Abstract ciphertext), and a second section having unencrypted
8 payload data (public key of A), said header comprising an output value having been generated by
9 an encryption of a basic value by an asymmetrical encryption method using a key of two
10 different keys including a private and a public key, said basic value representing a linkage of a
11 payload data key, with which said first section having encrypted payload data is encrypted using
12 a payload data encryption algorithm, and information deduced by a certain processing of the
13 unencrypted second section of the payload data, said information characterizing a certain part of
14 said payload data stream unambiguously (See rejection of claim 1 above), said method
15 comprising the following steps: obtaining said output value from said header (See Van Oorschot
16 Fig. 4 "B's Header Field" and Col. 4 Lines 51-52); decrypting said output value using the other
17 key of said asymmetrical encryption method to obtain said basic value (See Van Oorschot Fig. 4
18 "private key decryption" and ""B's high trust private key" and Col. 4 Lines 53-54); processing
19 the unencrypted second section of said payload data stream using the processing method used
20 when encrypting to deduce information characterizing the unencrypted second (See Van
21 Oorschot Fig. 4 "X-fields" and Col. 6 Lines 45-47); linking said information and said basic value
22 using the corresponding linkage as it has been used when encrypting to obtain said payload data

1 key (See Van Oorschot Fig. 4 “Unlevelling” and “X-fields” and Col. 4 Lines 54-56); and
2 decrypting the first section containing the encrypted payload data using said payload data key
3 and said payload data encryption algorithm used when encrypting (See Van Oorschot Fig. 4
4 “symmetric decryption” and “message”), but Van Oorschot failed to disclose that the second
5 section included audio data, video data, a combination of audio data and video data, text data, or
6 binary data forming an executable program, or the X-fields containing audio data, video data, a
7 combination of audio data and video data, text data or binary data forming an executable
8 program.

9 Nardone teaches that movie data needs to be protected from being copied and that this is
10 generally done through encrypting the movie data (See Nardone Col. 1 Lines 22-37), and further
11 that in order to save on processing cost, only portions of the movie data should be encrypted (See
12 Nardone Col. 1 Summary of the Invention).

13 Yatsukawa teaches that by providing a public key in a digital certificate, the public key
14 can be authenticated by the recipient of the key (See Yatsukawa Col. 5 Paragraph 1).

15 It would have been obvious to the ordinary person skilled in the art at the time of
16 invention to employ the teachings of Nardone in the encryption system of Van Oorschot by
17 encrypting video data, and further by only encrypting portions of the data. This would have been
18 obvious because the ordinary person skilled in the art would have been motivated to protect
19 movie data and to save on processing cost. It further would have been obvious to the ordinary
20 person skilled in the art at the time of invention to employ the teachings of Yatsukawa in the
21 encryption system of Van Oorschot by providing the public key in a public key certificate in the
22 X-fields. This would have been obvious because the ordinary person skilled in the art would

Art Unit: 2131

1 have been motivated to provide the recipient with means to verify the authenticity of the public
2 key. Furthermore, it was well know that public key certificates contain text data.

3 Regarding claim 28, Van Oorschot disclosed a device for producing a payload data
4 stream comprising a header and a payload data block containing encrypted payload data (See
5 Van Oorschot Fig. 3 X-fields, header fields, and encrypted message field), comprising: a
6 generator for generating a payload data key for a payload data encryption algorithm for
7 encrypting payload data (See Van Oorschot Col. 6 Lines 41-43 and Fig. 3 "Create low trust
8 symmetric key" K'); a first encryptor for encrypting a first section of the payload data using said
9 payload data key and said payload data encryption algorithm to obtain an encrypted section of
10 said payload data block of said payload data stream (See Van Oorschot Col. 6 Lines 42-43 and
11 Fig. 3 "Symmetric encryption" and "encrypted message"), said first section including audio data,
12 video data, a combination of audio data and video data, text data, or binary data forming an
13 executable program (See Van Oorschot Abstract ciphertext), wherein a second section of the
14 payload data remains unencrypted (See Van Oorschot Col. 6 Lines 45-47 "public key of entity
15 A"); a processor for processing the unencrypted section of said payload data (See Van Oorschot
16 Col. 6 Lines 45-50 "hash of X" which contains the public key of A) to deduce information
17 characterizing the unencrypted second section of said payload data (See Van Oorschot Col. 6
18 Lines 49-60 $h_{40}(X)$); a linker for linking said information and said payload data key by means of
19 an invertible logic linkage to obtain a basic value (See Van Oorschot Col. 6 Lines 56-60 "K'
20 XOR $h_{40}(X)$ "); a second encryptor for encrypting said basic value using a key of two keys being
21 different from each other by an asymmetrical encryption method, said two different keys being
22 the public and the private keys respectively for said asymmetrical encryption method, to obtain

Art Unit: 2131

1 an output value being an encrypted version of said payload data key (See Van Oorschot Col. 6
2 Line 60 – Col. 7 Line 7); and entering said output value into said header of said payload data
3 stream (See Van Oorschot Col. 6 Line 65 – Col. 7 Line 7 and Fig. 3 “A’s header field” and “B’s
4 header field”), but Van Oorschot failed to disclose that the second section included audio data,
5 video data, a combination of audio data and video data, text data, or binary data forming an
6 executable program, or the X-fields containing audio data, video data, a combination of audio
7 data and video data, text data or binary data forming an executable program.

8 Nardone teaches that movie data needs to be protected from being copied and that this is
9 generally done through encrypting the movie data (See Nardone Col. 1 Lines 22-37), and further
10 that in order to save on processing cost, only portions of the movie data should be encrypted (See
11 Nardone Col. 1 Summary of the Invention).

12 Yatsukawa teaches that by providing a public key in a digital certificate, the public key
13 can be authenticated by the recipient of the key (See Yatsukawa Col. 5 Paragraph 1).

14 It would have been obvious to the ordinary person skilled in the art at the time of
15 invention to employ the teachings of Nardone in the encryption system of Van Oorschot by
16 encrypting video data, and further by only encrypting portions of the data. This would have been
17 obvious because the ordinary person skilled in the art would have been motivated to protect
18 movie data and to save on processing cost. It further would have been obvious to the ordinary
19 person skilled in the art at the time of invention to employ the teachings of Yatsukawa in the
20 encryption system of Van Oorschot by providing the public key in a public key certificate in the
21 X-fields. This would have been obvious because the ordinary person skilled in the art would

1 have been motivated to provide the recipient with means to verify the authenticity of the public
2 key. Furthermore, it was well known that public key certificates contain text data.

3 Regarding claim 29, Van Oorschot disclosed a device for decrypting an encrypted
4 payload data stream comprising a header and a payload data block containing a first section
5 having encrypted payload data (encrypted message), said first section including audio data,
6 video data, a combination of audio data and video data, text data, or binary data forming an
7 executable program (See Van Oorschot Abstract ciphertext), and a second section having
8 unencrypted payload data (public key of A), said header comprising an output value having been
9 generated by an encryption of a basic value by an asymmetrical encryption method using a key
10 of two different keys including a private and a public key, said basic value representing a linkage
11 of a payload data key, with which said first section having encrypted payload data is encrypted
12 using a payload data encryption algorithm, and information deduced by a certain processing of
13 the unencrypted second section of the payload data, said information characterizing a certain part
14 of said payload data stream unambiguously (See rejection of claim 1 above), said device further
15 comprising: means for obtaining said output value from said header (See Van Oorschot Fig. 4
16 "B's Header Field" and Col. 4 Lines 51-52); a first decryptor for decrypting said output value
17 using the other key of said asymmetrical encryption method to obtain said basic value (See Van
18 Oorschot Fig. 4 "private key decryption" and "B's high trust private key" and Col. 4 Lines 53-
19 54); a processor for processing the unencrypted second section of said payload data stream using
20 the processing method used when encrypting to deduce information characterizing the
21 unencrypted second (See Van Oorschot Fig. 4 "X-fields" and Col. 6 Lines 45-47); a linker for
22 linking said information and said basic value using the corresponding linkage as it has been used

Art Unit: 2131

1 when encrypting to obtain said payload data key (See Van Oorschot Fig. 4 “Unlevelling” and
2 “X-fields” and Col. 4 Lines 54-56); and a second decryptor decrypting the first section
3 containing the encrypted payload data using said payload data key and said payload data
4 encryption algorithm used when encrypting (See Van Oorschot Fig. 4 “symmetric decryption”
5 and “message”), but Van Oorschot failed to disclose that the second section included audio data,
6 video data, a combination of audio data and video data, text data, or binary data forming an
7 executable program, or the X-fields containing audio data, video data, a combination of audio
8 data and video data, text data or binary data forming an executable program.

9 Nardone teaches that movie data needs to be protected from being copied and that this is
10 generally done through encrypting the movie data (See Nardone Col. 1 Lines 22-37), and further
11 that in order to save on processing cost, only portions of the movie data should be encrypted (See
12 Nardone Col. 1 Summary of the Invention).

13 Yatsukawa teaches that by providing a public key in a digital certificate, the public key
14 can be authenticated by the recipient of the key (See Yatsukawa Col. 5 Paragraph 1).

15 It would have been obvious to the ordinary person skilled in the art at the time of
16 invention to employ the teachings of Nardone in the encryption system of Van Oorschot by
17 encrypting video data, and further by only encrypting portions of the data. This would have been
18 obvious because the ordinary person skilled in the art would have been motivated to protect
19 movie data and to save on processing cost. It further would have been obvious to the ordinary
20 person skilled in the art at the time of invention to employ the teachings of Yatsukawa in the
21 encryption system of Van Oorschot by providing the public key in a public key certificate in the
22 X-fields. This would have been obvious because the ordinary person skilled in the art would

1 have been motivated to provide the recipient with means to verify the authenticity of the public
2 key. Furthermore, it was well known that public key certificates contain text data.

3 Regarding claim 2, Van Oorschot, Nardone and Yatsukawa disclosed that said payload
4 data encryption algorithm is a symmetrical encryption algorithm (See Van Oorschot Fig. 3
5 "symmetric encryption").

6 Regarding claim 3, Van Oorschot, Nardone and Yatsukawa disclosed that said invertible
7 logic linkage is self-inverting and includes an XOR- linkage (See Van Oorschot Col. 6 Lines 56-
8 60).

9 Regarding claim 4, Van Oorschot, Nardone and Yatsukawa disclosed that one key of said
10 two keys being different from each other is the private key of a producer of said payload data
11 stream or the public key of a consumer of said payload data stream (See Van Oorschot Fig. 3 B's
12 high trust public key).

13 Regarding claim 5, Van Oorschot, Nardone and Yatsukawa disclosed that said part of
14 said payload data stream being processed to deduce said information includes at least a part of
15 said header (See Van Oorschot Fig. 3 "X-Field" and Col. 6 Lines 49-55).

16 Regarding claim 6 Van Oorschot, Nardone and Yatsukawa disclosed that said step of
17 processing comprises forming a hash sum (See Van Oorschot Col. 6 Lines 49-55).

18 Regarding claim 7, Van Oorschot, Nardone and Yatsukawa disclosed further comprising
19 the following step: identifying an algorithm being used in said step of processing by an entry into
20 said header (See Van Oorschot Abstract Lines 14-16).

21 Regarding claim 14 Van Oorschot, Nardone and Yatsukawa disclosed that said step of
22 processing further comprises the following sub-step: setting said entry for said output value in

1 said header to a defined value and processing said entire header, including said entry set to a
2 defined value (See Van Oorschot Fig. 3 "X-Field" and Col. 6 Lines 49-55).

3 Regarding Claim 16, Van Oorschot, Nardone and Yatsukawa disclosed the following
4 step: identifying said payload data encryption algorithm by an entry into said header of said
5 payload data stream (See Van Oorschot Abstract Lines 14-16).

6 Regarding claim 19, Van Oorschot, Nardone and Yatsukawa disclosed that said part
7 being processed to deduce said information is said header (See Van Oorschot Fig. 4 "X-Fields").

8 Regarding claim 23, Van Oorschot, Nardone and Yatsukawa disclosed that one key
9 having been used when encrypting is the public key of said asymmetrical encryption method,
10 while the other key having been used when decrypting is the private key of said asymmetrical
11 encryption method (See Van Oorschot Fig. 3 "B's high trust public key" and Fig 4 "B's high
12 trust private key").

13 Regarding claim 24, Van Oorschot, Nardone and Yatsukawa disclosed that said step of
14 processing includes forming a hash sum (See Van Oorschot Col. 6 Lines 49-55 and Fig. 4
15 "Unlevelling").

16 Regarding claim 25, Van Oorschot, Nardone and Yatsukawa disclosed that a part of said
17 header having been set to a defined value for said step of processing when encrypting is set to the
18 same defined value for said step of processing when decrypting (See Van Oorschot Fig. 3 "X-
19 fields" and Fig. 4 "X-fields" wherein they must be the same defined value because they were
20 both set by the sender upon sending).

21 Regarding claim 26, Van Oorschot, Nardone and Yatsukawa disclosed that said part of
22 said header being set to a defined value includes said entry for said output value of said header

Art Unit: 2131

1 (See Van Oorschot Fig. 3 "B's header field" and Fig. 4 "B's header field" wherein they must be
2 the same defined value because they were both set by the sender upon sending).

3 Regarding claim 27, Van Oorschot, Nardone and Yatsukawa disclosed that said step of
4 linking comprises using an XOR-linkage (See Van Oorschot Col. 6 Lines 56-60 and Col. 4 Lines
5 54-56 and Fig. 4 "Unlevelling").
6

7 Claims 8, 11-12, 18, and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable
8 over Van Oorschot, Nardone and Yatsukawa as applied to claims 1 and 17 above, and further in
9 view of Matyas et al. (US Patent Number 5,200,999) hereinafter referred to as Matyas.

10 Van Oorschot, Nardone and Yatsukawa disclosed a system for sending a message from a
11 sender to a receiver in which the message was encrypted using a key, the key was encrypted, and
12 then the key was sent to the receiver with the encrypted message (See Van Oorschot Abstract
13 and Fig. 3). Van Oorschot further disclosed decrypting the key, and using the key to decrypt the
14 message at the receiver (See Van Oorschot Abstract and Fig. 4). However, Van Oorschot,
15 Nardone and Yatsukawa failed to disclose sending license data along with the key and message.

16 Matyas teaches that when sending a key, in order to authenticate the use of the key, and
17 the validity of the key, certain data (License data) should be placed in the header along with the
18 key. This data includes key type, key usage data (for history purposes), algorithm identifier,
19 algorithm-specific data, key start date/time, key expiration data/time, device identifier, user
20 identifier, key identifier, logical device identifier, and user-defined data (See Matyas Col. 13
21 Line 66 – Col. 14 Lines 60). Matyas further teaches that this information should be verified
22 prior to use of the key (See Matyas Col. 100).

23 It would have been obvious to the ordinary person skilled in the art at the time of
24 invention to employ the teachings of Matyas in the key and message sending system and method
25 of Van Oorschot, Nardone and Yatsukawa by placing the license information, taught by Matyas,
26 in the header of the message and checking this information prior to allowing the key and
27 message to be decrypted. This would have been obvious because the ordinary person skilled in

Art Unit: 2131

1 the art would have been motivated to protect the interests of the sender of the message and to
2 ensure the security of the message.

3
4 Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of
5 Van Oorschot, Nardone, Yatsukawa and Matyas as applied to claim 8 above, and further in view
6 of Klemba et al. (US Patent Number 5,710,814) hereinafter referred to as Klemba.

7 Van Oorschot, Nardone, Yatsukawa and Matyas disclosed sending license data for
8 controlling the usage of a key and message, including usage history (See rejection of claim 8
9 above), but failed to disclose the data including how often the message could be decrypted.

10 Klemba teaches that license data can be used to control the number of uses of a
11 cryptographic function (See Klemba Col. 14 Lines 14-19).

12 It would have been obvious to the ordinary person skilled in the art at the time of
13 invention to employ the teachings of Klemba in the messaging system and method of Van
14 Oorschot, Nardone, Yatsukawa and Matyas by using the license information to limit the number
15 of times the message could be decrypted. This would have been obvious because the ordinary
16 person skilled in the art would have been motivated to protect the interests of the sender of the
17 message as well as to protect the message against compromise.

18
19 Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination
20 of Van Oorschot, Nardone, Yatsukawa and Matyas as applied to claim 8 above, and further in
21 view of Edenson et al. (Us Patent Number 6,198,875) hereinafter referred to as Edenson.

22 Van Oorschot, Nardone, Yatsukawa and Matyas disclosed sending license data for
23 controlling the usage of a key and message, including usage history (See rejection of claim 8

Art Unit: 2131

1 above), but failed to disclose the data including how often the message could be copied and how
2 often it had already been copied.

3 Edenson teaches that license information can include how many copies of licensed data
4 can be made (See Edenson Col. 4 Paragraph 2).

5 It would have been obvious to the ordinary person skilled in the art at the time of
6 invention to employ the teachings of Edenson in the messaging system of Van Oorschot,
7 Nardone, Yatsukawa and Matyas by including information regarding the number of allowed
8 copies of the message that are permitted. This would have been obvious because the ordinary
9 person skilled in the art would have been motivated to protect the interests of the message
10 sender, and to protect the message itself from unauthorized distribution. Further, it would have
11 been necessary to also keep track of the number of copies already made in order to enforce the
12 copy limit.

13
14 Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination
15 of Van Oorschot, Nardone, Yatsukawa and Matyas as applied to claim 8 above, and further in
16 view of Schneier ("Applied Cryptography Second Edition").

17 Van Oorschot, Nardone, Yatsukawa and Matyas disclosed sending license data for
18 controlling the usage of a key and message, including usage history (See rejection of claim 8
19 above), but failed to disclose including the license in the hash function.

20 Schneier teaches that hashes are used to authenticate the data being hashed upon receipt
21 of the data in order to detect any unauthorized changes to the data (See Schneier Pages 30-31
22 Section 2.4).

Art Unit: 2131

1 It would have been obvious to the ordinary person skilled in the art at the time of
2 invention to employ the teachings of Schneier in the messaging system of Van Oorschot,
3 Nardone, Yatsukawa and Matyas by hashing the License data along with the X-fields. This
4 would have been obvious because the ordinary person skilled in the art would have been
5 motivated to protect against undetected changes to the license data sent with the message.

6
7 Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Oorschot,
8 Nardone, and Yatsukawa as applied to claim 1 above, and further in view of Roediger (US Patent
9 Number 4,899,333).

10 Van Oorschot, Nardone, and Yatsukawa disclosed sending a message from a sender to a
11 receiver, including a header and a hash of the header (See Van Oorschot Col. 6), but Van
12 Oorschot failed to disclose including a sender identifier and a receiver identifier in the header, or
13 in the hash.

14 Roediger teaches that packet headers contain a source address (sender identifier) and a
15 destination address (recipient identifier) and that a checksum should include these fields in order
16 to ensure that the fields are not corrupted (See Roediger Col. 37 Lines 53-63).

17 It would have been obvious to the ordinary person skilled in the art at the time of
18 invention to employ the teachings of Roediger in the messaging system of Van Oorschot,
19 Nardone, and Yatsukawa by including source and destination addresses in the header and
20 including these in the hash. This would have been obvious because the ordinary person skilled
21 in the art would have been motivated to provide means for routing the message from the sender

Art Unit: 2131

1 to the receiver and allowing the receiver to verify that it was the intended receiver of the
2 message.

3
4 Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Oorschot,
5 Nardone, and Yatsukawa as applied to claim 17 above, and further in view of Schneier.

6 Van Oorschot, Nardone, and Yatsukawa disclosed using a public key of the receiver for
7 encryption (See rejection of claim 23 above) but failed to disclose using a private key of an
8 asymmetrical key pair for encryption.

9 Schneier teaches that by encrypting data using a senders private key, the receiver can use
10 the senders public key to authenticate the sender of the data (See Schneier Pages 53-54).

11 It would have been obvious to employ the teachings of Schneier in the messaging system
12 of Van Oorschot, Nardone, and Yatsukawa by encrypting the leveled key with the private key of
13 the sender and decrypting it with the public key of the sender. This would have been obvious
14 because the ordinary person skilled in the art would have been motivated to provide sender
15 authentication at the receiver.

16
17 Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Oorschot,
18 Nardone, and Yatsukawa as applied to claims 28 and 29 above, and further in view of Kane et al.
19 (US Patent Number 5,315,635) hereinafter referred to as Kane.

20 Van Oorschot, Nardone, and Yatsukawa disclosed sending messages from a sender to a
21 receiver (See Van Oorschot Abstract), but failed to disclose the sending being from a personal
22 computer to a personal computer.

Art Unit: 2131

1 Kane teaches that messages can be sent between personal computers (See Kane Col. 1
2 Lines 45-51).

3 It would have been obvious to the ordinary person skilled in the art at the time of
4 invention to employ the teachings of Kane in the messaging system of Van Oorschot, Nardone,
5 and Yatsukawa by sending the encrypted messages from a sending personal computer to
6 receiving personal computer. This would have been obvious because the ordinary person skilled
7 in the art would have been motivated to protect messages sent between two personal computers.

8 *Conclusion*

9 Claims 1-30 have been rejected and claim 31 has been cancelled.

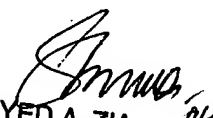
10 Any inquiry concerning this communication or earlier communications from the
11 examiner should be directed to Matthew T. Henning whose telephone number is (571) 272-3790.
12 The examiner can normally be reached on M-F 8-4.

13 If attempts to reach the examiner by telephone are unsuccessful, the examiner's
14 supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the
15 organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2131

1 Information regarding the status of an application may be obtained from the Patent
2 Application Information Retrieval (PAIR) system. Status information for published applications
3 may be obtained from either Private PAIR or Public PAIR. Status information for unpublished
4 applications is available through Private PAIR only. For more information about the PAIR
5 system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR
6 system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would
7 like assistance from a USPTO Customer Service Representative or access to the automated
8 information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

9
10
11
12
13
14
15 /Matthew Henning/
16 Assistant Examiner
17 Art Unit 2131
18 6/22/2007

19
20

SYED A. ZIA 06/22/2007
PRIMARY EXAMINER